ZOOLOGY.—A new polychaetous annelid of the family Paraonidae from the North Atlantic. Marian H. Pettibone, University of New Hampshire. (Communicated by Fenner A. Chace, Jr.)

(Received June 20, 1957)

In working over some of the uncatalogued polychaete material in the United States National Museum, some specimens belonging to an undescribed species of Paraonidae were found. They were dredged by the Albatross in the North Atlantic in 1883 and 1884.

Family Paraonidae Cerruti (Levinseniidae Mesnil and Caullery) Genus Aricidea Webster, 1879

Type.—Aricidea fragilis Webster, 1879 (by monotypy).

Diagnosis.—Body long, slender, with numerous segments. Prostomium subconical, with dorsal median antenna and pair of nuchal organs. First or buccal segment achaetous, more or less fused with prostomium. Parapodia biramous, lacking distinct setal lobes, with simple smooth capillary setae, with conical to filiform postsetal notopodial lobes (sometimes referred to as dorsal cirri) and with or without postsetal neuropodial lobes (sometimes referred to as ventral cirri) on some anterior segments. Branchiae simple, paired, straplike, dorsal to notopodia, absent from few anterior segments (3-4) and from a long posterior region (9-60 pairs of branchiae). Anal cirri 3, filiform. Anterior end of digestive tube evaginable as a cylindrical or feebly lobed proboscis.

Subgenus Aricidea s. str.

Diagnosis.—With only capillary setae in notopodia, without modified acicular setae in some posterior segments. With or without modified setae (crotchets, acicular setae or setae with mucronate tips) in posterior neuropodia.

Aricidea (Aricidea) albatrossae, n. sp. Fig. 1, a-f

? *Aricidea fragilis* McIntosh, 1885, p. 354, pl. 43, figs. 4, 5, pl. 22 A, fig. 18; not Webster, 1879.

The species is known from 14 specimens, all incomplete posteriorly, dredged in mud and ooze

 $^{\rm 1}\,\rm This$ study was aided by a grant from the National Science Foundation (NSF-G 2012).

at four *Albatross* stations in the deep North Atlantic. The types (U.S.N.M. 28638, 28639) were taken at *Albatross* station 2018; May 7, 1883; 37° 12′ N., 74° 20′ W., 788 fathoms, blue mud.

Description.—Incomplete anterior end of 54 segments 15 mm long and 2 mm wide. Prebranchial region rounded, anterior branchial region strongly flattened dorsoventrally, more posterior branchial region and postbranchial region subcylindrical. Prostomium (Fig. 1, a-c) rounded anteriorly, wider posteriorly, with a short median antenna near middle extending back nearly to first setiger and with a pair of nuchal organs; no eyes visible. First or buccal segment achaetous, more or less fused with prostomium, enlarged anteroventrally and forming lateral lips of mouth; lobulated lower lip of mouth formed by ventral part of first two setigers. Branchiae consist of 26-30 pairs, beginning on setiger 4; they are simple and straplike, with short slender tips and they turn medially over dorsum from origins dorsal to notopodia (Fig. 1, a, e). Three prebranchial and anterior branchial segments (about first 20 setigers) with thick bundles of noto- and neurosetae which taper to fine capillary tips (Fig. 1, d, e). Notopodia and neuropodia of posterior branchial segments with setae becoming gradually fewer in number and more slender; postbranchial segments with small bundles of slender, capillary noto- and neurosetae (Fig. 1, f). Notopodial postsetal lobes on prebranchial segments conical (Fig. 1, d), on branchial segments subulate (Fig. 1, e), gradually becoming more slender and filiform (Fig. 1, f). Neuropodial postsctal lobe on first setiger conical (Fig. 1, d), nearly as large as notopodial; on about next 20 setigers low, rounded (Fig. 1, e); on rest of segments lacking. In all specimens examined, the posterior ends were lacking and the proboscises were not extended.

Remarks.—Aricidea albatrossae, a deep-water species, resembles the type species, A. fragilis Webster, found intertidally in Virginia and North Carolina (Webster, 1879, p. 255; Hartman, 1944, p. 315), and A. belgicae (Fauvel), reported from

the Antaretic (Fauvel, 1936, p. 29; Monro, 1939, p. 127), in having a short prostomial antenna and in lacking modified neuropodial setae in the posterior segments (at least to setiger 54 in A. albatrossae); the three species differ as shown in the table opposite.

The anterior fragment (about 36 segments), reported by McIntosh (1885) as A. fragilis, from off New York in 1,340 fathoms may prove to be A. albatrossae.

	A. bel- gicae	A. albatrossae, n. sp.	A. fragilis
Number of pairs of branchiae	15-20	26-30	50-60
Neuropodial postsetal lobes	Absent	Conical on first seti- ger; low, rounded on about 20 setigers; absent on following.	Conical to low rounded on about 40 setigers; absent on following.

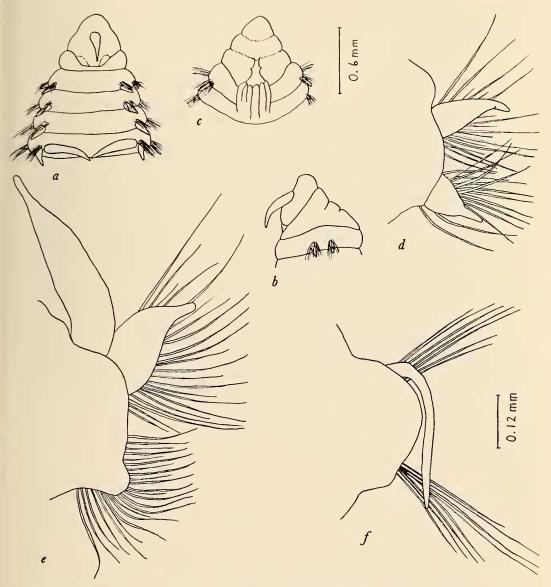


Fig. 1.—Aricidea albatrossae, n. sp.: a, Dorsal view anterior end; b, same, lateral view; c, same, ventral view; d, right parapodium from first setiger, posterior view; e, same, from setiger 7; f, same, from post-branchial segment. (All parapodia drawn to same scale.)

Additional records.—Albatross station 2072, 1883, 41° 53′ N., 65° 35′ W., 858 fathoms, gray mud; station 2105, 1883, 37° 50′ N., 73° 03′ W., 1,395 fathoms, globigerina ooze; station 2207, 1884, 39° 35′ N., 71° 31′ W., 1,061 fathoms, green mud.

Distribution.—Deep North Atlantic off Massachusetts to off Chesapeake Bay, 788 to 1,395 fathoms.

REFERENCES

Fauvel, P. Polychètes Expédition antarctique Belge. Rés. Voy. Belgica (1897-99), Zool.: 46 pp., 4 figs., 1 pl. 1936. Hartman, O. Polychaetous annelids. Part VI. Paraonidae, Magelonidae, Longosomidae, Ctenodrilidae, and Sabellariidae. Allan Hancock Pac. Exped. 10: 311–388, pls. 27–42. 1944.

McIntosh, W. C. Report on the Annelida Polychaeta collected by H.M.S. Challenger during the years 1873-76. Challenger Reports Zool. 12(34): 554 pp., 84 pls. 1885.

Monro, C. C. A. *Polychaeta*. Rep. B.A.N.Z. Antarctic Res. Exped. (1929–31), ser. B, **4**(4): 87–156, 28 figs. 1939.

Webster, H. E. On the Annelida Chaetopoda of the Virginian coast, Trans. Albany Inst. 9: 202– 269, 11 pls. 1879.

FAUNAL CURIOSITIES OF CUBA

Lizards apparently immune to bullets, batcrushing snakes, pigmy boa constrictors, frogs that never are pollywogs, and frogs less than a third of an inch long are among the curiosities of reptile and amphibian life recently collected in Cuba for the Smithsonian Institution by David Hardy, a graduate student of the University of Maryland. Most curious of the lot are the "bulletproof" lizards. They are large iguanas, 3 to 4 fect long, with a curious resemblance to antediluvian monsters. Mr. Hardy found them in limestone outeroppings and on sandy islands along the Cuban coast. When shot, he says, they turn over on their backs and lie still, but when approached the apparently dead reptile suddenly "comes to life again," gets on its feet with marvelous speed, and disappears down a hole. About the only way to collect specimens is with a noose. The supposed immunity to bullets, of course, is not quite true. Any creature can be killed if hit in the right place. Still, Hardy says, he captured one specimen with 22 shots in its body, apparently none the worse for the experience. The seeming immunity he believes is due to two things—the toughness of the hide and the quite primitive organization of the nervous system.

The bat-eating boas he collected are true members of the constrictor family and show a curious adaptation. In the Trinidad Mountains of Cuba's south coast are many bat caves. In their dark, damp depths literally thousands of fruit-eating bats spend the day asleep. They fly out at dusk. Each cave consists of several chambers, which have very narrow entrances, often barely big enough for a bat to squeeze through.

The big snakes hide, coiled in rock crevices, beside these entrances. When the nightly exodus takes place a boa will strike time and time again, nearly always getting a bat, whose progress is impeded by the narrow aperture through which it must go. Then, after the fashion of boas, the animal is crushed in the coils and eaten. The snakes apparently have prodigious appetites. In one cave Hardy found 70 boas, and he obtained 9 dead bats from a single snake.

Another curiosity of Cuba's reptile life is the pigmy boa, less than 2 feet long, which lives mostly on small lizards, which it crushes in its coils. It progresses rapidly through the hot sand of its habitat by a "side-winding" type of locomotion, familiar in some rattlesnakes but otherwise unknown. Other boas have the sinuous motion common to snakes in general. In the sidewinding movement, Mr. Hardy believes, the snake's body is momentarily almost completely off the ground with each twist. It may have been evolved, he speculates, as a means of relief from the scaring heat of the sand.

The tadpoleless frogs are creatures of the rainforest canopy, found only in the tops of the tallest trees and chiefly in high mountains. Mr. Hardy found one of the best collecting sites the summit of Pico Turquino in the Sierra Maestro Mountains, the highest peak in Cuba. The eggs, laid in pools formed in hollows of large leaves, hatch as frogs, not tadpoles, metamorphosis being completed entirely within the egg. The pigmy frogs are very rare but are distributed all over the island, often with gaps of 100 miles or more between colonies.